



FLORIDA LAKE MANAGEMENT SOCIETY

Volume 17 No. 1

Winter 2006

Officers

President

Jim Griffin

Vice President

John Burns

Secretary

Michelle Jeansonne

Treasurer

Michael Perry

Past President

Chuck Hanlon

Board of Directors

Shannon Carter-Wetzel

Mike Coveney

David Evans

Clell Ford

Kelly Levy

Erich Marzolf

Sean McGlynn

Martin Montalvo

Todd Olsen

Ann Shortelle

Steve Weinsier

President's Corner

I am honored to serve as your president for 2005/2006 and I look forward to another successful year for our society. High on the agenda of important items for the coming year is the FLMS conference. This will be the first time we have held our conference in the Northeast section of Florida and it matches nicely with the inaugural year for our new Northeast FLMS Chapter. I am looking for big things from the Chapter and for the conference. The conference committee has completed negotiations with the Casa Monica Hotel, a historic, landmark hotel in the center of St. Augustine. I am excited at the opportunities that this beautiful hotel in our nation's oldest city offers. More about the conference, the program, and conference activities will be provided in this (see **John**

Burn's article) and other newsletters and on the Society's website (<http://flms.net>). Please make sure you circle the dates – Monday, June 5, through Thursday, June 8 on your 2006 calendar.

One of my goals for the Society this year is to form a closer relationship with Florida LAKEWATCH and IFAS, as well as major state agencies that deal with lake water quality and habitat health. We began this effort at our last Board of Directors (BOD) meeting by hosting a forum on the Florida Department of Environmental Protection's (FDEP's) use of LAKEWATCH data in the total maximum daily load (TMDL) process. Jan Mandrup-Paulsen, Administrator of the FDEP's Watershed Assessment Section of the Bureau of Watershed Management presented an interesting and informative discussion of the TMDL process and

FDEP's use of LAKEWATCH data within that process. We also heard from Dr. Dan Canfield, Dr. Carl Havens and Mark Hoer of LAKEWATCH. Please see **David Evan's** article in this newsletter.

I am also interested in promoting and growing our five Chapters. The South Florida Chapter recently held a workshop and has plans for additional workshops for lake and pond property owners, The Central Florida and Southwest Florida Chapters will be supporting an IFAS effort in Kissimmee in November and the Southwest Chapter held their second FLMS ***Weekend in My Watershed*** event at Weedon Island Preserve in Pinellas County in October. As you can see the Society and its Chapters are busy and growing. If you are reading this and want to get involved in these and other events please contact your local chapter. The Chapter activities and addresses are listed on our website.

We have an exciting year ahead of us as a Society. You will see by **Chuck Hanlon's** article that our "Love Your Lake" grant program is making a huge and positive impact in the area of lake and wetland restoration and education. You will also note from **Gene Medley's** article that we have big plans for

hosting the North American Lake Management Society (NALMS) conference for 2007 and have similar plans for the 2007 FLMS conference.

The finances of the Society are stable. In the communications department we are showing a new face with the revamped website (see article by **Eric Marzolf**) and a Newsletter under new editorship (see editors corner). Overall we are a healthy organization fully equipped to meet our mission of promoting the protection, enhancement, restoration and good management of Florida's aquatic resources.

There is one area on which we need to concentrate and that is the growth of our membership base. We have a stable to slightly growing membership but we need to make a stronger effort to reach a greater segment of Florida's lake and pond property owners and lake professionals. It is my goal to increase membership by 25% or about 75 new members in 2006. One way we are working to be more inclusive is by establishing a new membership category for college students and volunteer monitors. This new category has a non-voting status but will offer full privileges in all other respects. There will be no dues for this category. We

only ask the member continues either volunteer efforts or, if a student, he or she is active in an environmental organization. You will see more on this later. As you can see we are trying new approaches to increase the reach of FLMS. Please join me in this effort. If you have any ideas on how to increase membership or if there are any other specific areas that you would like to see your Society explore please let me know (griffinjc1@aol.com).

Jim Griffin

FLMS TO HOST THE 2007 NALMS 27th INTERNATIONAL SYMPOSIUM

Well, it's official. The Florida Lake Management Society has been selected to host the NALMS Symposium in 2007. Florida has always proven to be a wonderful venue for this event. The 07' conference will take place at the end of October, and will represent the fourth time that the symposium has come to Florida. Two of the past three events have been in Orlando. The only exception was in 2000 when we traveled to Miami. It was at this conference where one of the NALMS' legends was born - the infamous barf boat adventure. A magical "high seas" cruise on one of

Miami's floating gambling casinos and discothèques. A fond memory for many of us, no doubt.

The 07' conference will be held at the Coronado Springs Hotel located on the Disney property in Orlando. The Coronado Springs hotel is Disney's official conference and meeting facility. As such, it is well suited for large gatherings, and there will be many opportunities for a variety of special events and individual excursion both on and off site. This conference will provide Florida lake enthusiasts with an excellent venue for showcasing our work on the state's water resources, and provide the ability to network with leading limnologist from around the world.



Coronado Springs Resort
Orlando

Preparations for the conference are already underway. Harvey Harper and I visited the facility last year, and there will another on site visit in January. Jim

Griffin and Mike Perry have graciously stepped forward to serve as conference co-chairs, and Harvey Harper will serve as the program chair.

Stay tuned for updates as the conference approaches. If you are interested in joining us and working on the symposium planning, you should contact one of the conference chairs.

Best Regards,

Gene Medley, NALMS
President

The 17th Annual FLMS
Conference, Casa
Monica Hotel in ST.
Augustine June 5-8,
2006.

Mark your calendar now for the 2006 Florida Lake Management Conference. To be held at the Casa Monica Resort, St. Augustine, FL June 5-8, 2006. You won't want to miss this conference.

The call for papers and the conference itinerary will soon be posted to the FLMS website, www.flms.net.

FLMS 2006 Conference
Contacts

**Contact the Conference
Coordinator:**

John Burns
PBS&J
701 San Marco Blvd

Suite 1201
Jacksonville, FL 32207
Phone: (904) 363-8478
Fax: (904) 232-1056
E-Mail: jburns@pbsj.com

**Contact the Program
Chairman:**

Dr. Harvey H. Harper P.E.
Environmental Research &
Design, Inc.
3419 Trentwood Blvd.
Suite 102
Orlando, FL 32812 Phone
: (407) 855-9465 Fax: (407)
826-0419
E-Mail: hharper@erd.org

**Contact the Exhibitor
Chair:**

Shailesh Patel
Dredging & Marine
Consultants
5889 Airport Road
Suite 1407
Port Orange, FL 32128
Phone: (386) 304-6505
Fax: (386) 304-6506
E-Mail: spatel@dmces.com

Northeast FLMS

The Northeast Chapter of the Florida Lake Management Society (NEFLMS) held its first meeting September 22, 2005 following approval of its Bylaws by the FLMS Board of Directors. All meeting dates and schedules for the NE Chapter are advertised on the FLMS website.

The first meeting focused on the need to identify existing FLMS members in the NE Florida area,

NEFLMS officers, and potential for new FLMS members who live and work in the area, the 2006 FLMS Annual Conference in St. Augustine, FL, and overall student participation in FLMS.

NEFLMS is currently working to develop a FLMS membership list for NE Florida and is identifying potential new members in the Jacksonville, St. Augustine, Palatka, and Gainesville areas. An emphasis on student involvement in the chapter was set as a priority given the proximity of Jacksonville University, the University of North Florida, Flagler College, the University of Florida, and other academic institutions.

NEFLMS has extended a request for nominations to establish NEFLMS officers (please see the NEFLMS web page). Nominations for officers and a review of the NEFLMS Bylaws will be conducted at the next NEFLMS meeting in Jacksonville, FL (date to be announced).

The 2006 FLMS Annual Conference will be held in St. Augustine, FL and will require assistance from NEFLMS members. We are currently looking for volunteers and students to assist with a number of conference supporting tasks. Please contact the following NEFLMS members if you would like to

volunteer your services:

John Burns, PBS&J
jwburns@pbsj.com;

Dean Campbell, SJRWMD
dcampbell@sjrwmd.com;

Jason Rickards,
Environmental Resource
Solutions, Inc.
jrickards@ersenvironmental.com

Ann Shortell, MacTech,
ashortelle@mactech.com

Board of Directors' Meetings

The FLMS Board of Directors meetings are open to all FLMS members. Any FLMS member is invited to attend to view the Society in action or provide input on current issues. Meetings are held at the Reedy Creek Improvement District office at Disney and begin at 11 am. For specific directions and meeting dates contact any Board member.

FLMS Board Discusses Florida LAKEWATCH and the State Total Maximum Daily Load Program

Introduction

On September 16th, the FLMS Board of Directors met with Jan Mandrup-Poulsen of Florida Department of Environmental Protection

(FDEP) and Dr. Dan Canfield, Mark Hoyer and Dr. Karl Havens representing LAKEWATCH. The meeting was designed to help the participants learn more about ways FDEP is using LAKEWATCH data in the process of establishing lists of impaired waters and Total Maximum Daily Loads (TMDLs). This meeting was organized in part because of a concern by the FLMS Board that FDEP might be ignoring data from the volunteer LAKEWATCH program and that LAKEWATCH data may not have been used to its fullest potential by the FDEP. As is frequently true, reality proved to be more complex and less controversial than conjecture.

LAKEWATCH Data and TMDLs

Florida LAKEWATCH is a volunteer citizen lake monitoring program that facilitates hands-on citizen participation in the management of Florida lakes through monthly monitoring activities. Coordinated through the University of Florida's Institute of Food and Agricultural Sciences/Department of Fisheries and Aquatic Sciences, the program has been in existence since 1986. In 1991 the Florida Legislature recognized the importance of the program and established Florida

LAKEWATCH in the state statutes (Florida Statute 1004.49.). LAKEWATCH is now one of the largest lake monitoring programs in the nation with over 1800 trained citizens monitoring 600+ lakes and 150 near-shore coastal areas, in more than 40 counties. The LAKEWATCH program and LAKEWATCH volunteers are important partners with FLMS in promoting the enhancement, conservation, restoration and management of Florida's aquatic resources.

The LAKEWATCH database is used by many groups including FDEP and is a tremendous asset to all state, regional and local water resource managers, lake homeowners associations, educational institutions, consultants, and the general public. However, there are legal barriers that prevent the use of LAKEWATCH data in the TMDL process as will be discussed later. The following is the legislative language that describes the structure and activities of the LAKEWATCH program:

"Section 1004.49, Florida Statutes. Florida LAKEWATCH Program.--The Florida LAKEWATCH Program is hereby created within the Department of Fisheries and Aquaculture of the Institute of Food and Agricultural Sciences at the University of Florida. The purpose of the program is to provide public education

and training with respect to the water quality of Florida's lakes. The Department of Fisheries and Aquaculture may, in implementing the LAKEWATCH program:

(1) Train, supervise, and coordinate volunteers to collect water quality data from Florida's lakes.

(2) Compile the data collected by volunteers.

(3) Disseminate information to the public about the LAKEWATCH program.

(4) Provide or loan equipment to volunteers in the program.

Perform other functions as may be necessary or beneficial in coordinating the LAKEWATCH program. Data collected and compiled shall be used to establish trends and general background information and shall in no instance be used in a regulatory proceeding."

Importantly, item (5) clearly states LAKEWATCH data "shall in no instance be used in a regulatory proceeding." This prevents these data to be used in certain phases of the TMDL process. Jan Mandrup-Poulsen pointed out, in his presentation to the FLMS Board, that after careful review of this legislation, the FDEP legal staff determined that LAKEWATCH data can be

used to track water quality as it compares to numeric criteria for lakes and for trend analysis and to initiate additional sampling by FDEP or other authorized agencies. For example, LAKEWATCH data can be used to document long-term water quality trends and to compile the planning list of impaired water bodies. LAKEWATCH data also can be used to assess nutrient or contaminant loads to lakes and in modeling of lake function to calculate TMDLs. Mr. Mandrup-Poulsen also emphasized the importance of data collected by LAKEWATCH and other volunteer monitoring groups in tracking water quality trends.

Brief Background on Florida's Total Maximum Daily Load Program

A Total Daily Maximum Load (TMDL) is the amount of a specific pollutant a water body can tolerate and still meet water quality standards; a TMDL is adopted for each pollutant causing impairment in a water body (segment). The identification of impaired waters is required by the *Federal Water Pollution Act of 1972*, the *Clean Water Act of 1977* and the *Water Quality Act of 1987*. In Florida, the listing process and other aspects of the TMDL program are governed by the *Florida Watershed Restoration Act*

found in section 403.067 of the Florida Statute (F.S.), and chapter 62-303 of the Florida Administrative Code (FAC).

The general schedule for completing TMDLs in Florida is based on the 1999 Consent Decree between the U. S. Environmental Protection Agency (USEPA) Region 4 and EarthJustice. The Consent Decree requires completion of 1,981 TMDLs, based on the FDEP 1998 impaired waters list, by 2011. FDEP's 1998 impaired waters list was developed before passage of the *Florida Watershed Restoration Act*; and is based on 1996 water quality monitoring data. These data have no minimum number of samples or quality assurance requirements, and therefore were not considered by FDEP as an adequate basis to establish a TMDL. Therefore, the Consent Decree Schedule for adopting specific TMDLs may be adjusted as a result of Florida's verification process and the addition or delisting of waters relative to the 1998 list.

The Florida TMDL process has been formalized by FDEP's five step approach which can be summarized as: (1) data collection and assessment; (2) follow-on data collection; (3) definition of the total allowable pollutant load; (4) development of a Basin Management Action Plan

(BMAP), and (5) implementation of the plan. During the BMAP development step the FDEP works with stakeholder to allocate pollutant loads to point and non-point sources and determine the party responsible for the specific pollution load, identify funding sources, set forth management strategies (stormwater retrofits, wastewater upgrades, best management practices, etc.), and secure commitments to implement the actions called for in the plan. Each BMAP will be adopted by an order of the Secretary of the FDEP and the implementation of the BMAP is accomplished cooperatively with stakeholders and can be viewed as an adaptive management tool. Its success is measured against objective standards and, where necessary, changes may be made (through Secretarial adoption).

Additional information on the TMDL program is available via internet at:

<http://www.dep.state.fl.us/water/tmdl/index.htm>

Summary

The primary limitation in use of LAKEWATCH data by FDEP is that these data may not be used to develop the final (verified) list of impaired water bodies for TMDLs or for the basis of enforcement actions.

LAKEWATCH data is extremely valuable and represents the largest single source of lake water quality sample data in Florida and is used by FDEP for trend analysis and as part of the initial data collection and analysis step in the TMDL process. It may also serve to initiate further sampling by FDEP or other agencies to support enforcement actions.

The FLMS Board wants to thank Jan Mandrup-Paulsen, Dr. Dan Canfield, Mark Hoyer and Dr. Karl Havens for allowing us to better understand the important role of LAKEWATCH data as well as the limitations to its use in the TMDL process and providing the basis of this article. We hope the reader now realizes with the Board that the FDEP realizes the importance of these data and that these limitations do not detract from the usefulness of the data for documenting long-term trends and for assessment of water quality in making sound water resource management decisions. Users of LAKEWATCH data benefit immensely from the hard work of numerous volunteers and LAKEWATCH staff. We want to commend the staff and volunteers who make LAKEWATCH one of the premier volunteer networks in the Nation.

It has long been recognized

that FLMS and LAKEWATCH have many goals in common. FLMS members can continue to support LAKEWATCH in the following ways: volunteer as a LAKEWATCH water quality monitor; use FLMS meetings for general public education and encouragement of participation in the LAKEWATCH program; enhance local involvement in LAKEWATCH through workshops held by FLMS chapters.

The value of volunteer monitoring by citizen scientists in Florida as well as the rest of the country can not be overstated. Data are needed on as many aquatic systems as possible to monitor trends and protect our valuable aquatic resources. Federal, state and local governments do not have the resources needed to cover all of the systems and volunteer monitoring can fill this gap. So as professionals, please support citizen scientists as they sample, protect and enjoy the wealth of aquatic systems in Florida.

David Evans

Love Your Lake Cost-Share Grant Program

In 2000, FLMS created the Love Your Lake Cost-Share grant program to fund lake, pond, and shoreline projects that demonstrate beneficial management

techniques that will help protect, preserve, and restore Florida's aquatic resources and promote environmental education. This program has been a huge success. Since 2001, FLMS has funded 18 Love Your Lake projects totaling \$89,470. This year's grant recipients include the following;

1. Science Center of Pinellas County – The Science Center of Pinellas County is a teaching museum that features hands-on educational opportunities for more than 45,000 visitors each year. FLMS in conjunction with a matching \$5,000 grant from the South West Florida Water Management District is supporting the enhancement of the science centers wetland learning area. The enhancement project will include enlarging and deepening the existing wetland/pond area, removal of invasive and exotic plants, installing a pond liner and a water supply and recirculation pump.

2. Arrow Lake in Sawgrass Lake Park – Sawgrass Lake Park is 400 acre parkland located in urbanized Pinellas County. The park offers almost 1 mile of elevated boardwalk through a maple swamp and 0.5 mile of foot trails that traverse an oak hammock. The Anderson Environmental Education Center, located at the park,

provides environmental education classes to approximately 3,000 fourth grade students annually, while annual attendance at the park exceeds 387,000 visitors.

Arrow Lake is a 1.6acre pond located near the Sawgrass Lake Park Education Center. Arrow Lake has an established littoral shelf but is in need of restoration. The shoreline restoration work being supported by FLMS includes installation of native aquatic vegetation and construction of a kiosk with interpretive educational signs describing habitat restoration, watershed recharge, flood protection and habitat management.

3. North Holiday Lake – St. Augustine - Holiday Lakes is a chain of ponds and lakes within the community of St. Augustine Shores. North Holiday Lake is the largest lake in the chain. This 30-acre lake drains directly into the adjacent tidal Moultrie Creek. Most of the vegetation around the edges of North Holiday Lake has been mowed down to the water line. The lake itself contains very little emergent vegetation and the exotic species Hydrilla is the dominant submersed plant. The restoration of North Holiday Lake and it's surrounding shoreline is being supported by FLMS and will

include; (1) constructing a swale that will decrease runoff entering the lake and increase water infiltration time; (2) establishing an emergent littoral zone and a no mow zone around the lake's perimeter to enhance wildlife habitat; (3) enhance the upland shoreline with native vegetation (e.g., cypress and way myrtle); (4) reduce the cost of Hydrilla management by stocking triploid grass carp and (5) installing educational signs describing the shoreline restoration project.

4. Central Florida Zoo - ZooLab is part of the Central Florida Zoo's (CFZ) new Discovery Center that opened in March 2005. Thousands of central Florida middle school students visit the CFZ each year to learn about environmental management and conservation. The zoo is expanding its teaching facility by constructing a ZooLab pond that will be utilized by fifth grade students as part of the Cycles in Nature program. The pond will be built on the shore of a stream that runs through the CFZ property and eventually into Lake Monroe and the St. Johns River. Students will have the opportunity to observe and identify life in and around the pond using microscopes, dip nets, magnifying glasses and field guides. A goal is to help students understand

how these plants and animals interact with their environment. The pond will also be used for summer camp programs. FLMS is supporting the construction of the ZooLab pond.

If you are interested in applying for a Love Your Lake Grant, project proposals must be received by March 1st. Work on approved projects must be completed by May 1st of the following year.

Chuck Hanlon

FLMS Updates Website



Florida Lake Management Society

The mission of the Florida Lake Management Society is to promote protection, enhancement, conservation, restoration, and management of Florida's aquatic resources; provide a forum for education and information exchange; and advocate environmentally sound and economically feasible lake and aquatic resource management for the citizens of Florida.

The Watershed Weekend Workshop in June was a success, [click here for more information](#). The next watershed weekend is October 14-15 at the Weedon Island Preserve in Pinellas County. More information is [here](#).

FLMS has local chapters throughout the state: Central Florida, Northwest Florida, Southwest Florida & Northeast Florida. FLMS is a chapter of the North American Lake Management Society.

In May FLMS's new website (flms.net) came online. I hope the new design makes it easier for everyone to find information. I would like to website to be a place where FLMS members and chapters can share information. I especially want everyone to know about the projects around Florida that the Love Your Lake Grants have supported and encourage members to keep their eyes out for projects that might

make use of support. If you have a set of photos on a lake you would like to see featured contact me and I will help you set up the pages. I encourage all FLMS's members and chapters to send me information on upcoming events and any other ideas for the site.

Thanks,

[Erich Marzolf](#)

Editor's Corner

I would like to thank the FLMS members who have given their time to prepare the various reports included in this newsletter. Their efforts help the FLMS newsletter meet the goal of informing all FLMS members of the society's activities and efforts to provide support and education to our members and our communities.

If you have information you would like to share or issues about which you would like more information please send your information to my email address: mjeansonne@sjrwm.com.

Thank you,

Michelle Jeansonne

Florida Chapter of the North American
Lake Management Society (NALMS)
Florida Lake Management Society
P. O. Box 950701
Lake Mary, FL
32795-0701

NON-PROFIT ORG.
U.S. POSTAGE
PAID
PERMIT NO. 62
GAINESVILLE, FLORIDA

FLMS Membership Form
Florida Lake Management Society

(A Chapter of the North American Lake Management Society)
P.O. Box 950701, Lake Mary, FL 32795-0701

Name: _____ Affiliation: _____
Address: _____ City: _____
County: _____ State: _____ Zip: _____
Phone: Home: () _____ Email: _____
Work: () _____ Fax: _____

Areas of Shareable Knowledge _____

Annual Dues (Includes Newsletter)

Individual	\$25
Non-Profit Organization	\$35
Business/Corporate	\$65
Contributor	\$100
Sponsor	\$250

Please make checks payable to: The Florida Lake Management Society and return to the above address.